

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

690 Walnut Ave. St. 150

Vallejo, CA 94592-1133

(707) 649-5453

(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-009437**Date Inspected:** 06-Oct-2009**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** Chen Xi**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Crossbeams**Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance Inspector (QA) Steve Hall was present during the times noted above for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island, in Shanghai, China. QA observed and/or found the following:

OBG CROSS BEAM CB1

This crossbeam has been loaded on the ship.

OBG CROSS BEAM CB2

This crossbeam has been loaded on the ship.

OBG CROSS BEAM CB3

This crossbeam has been loaded on the ship.

OBG CROSS BEAM CB4

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

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OBG CROSS BEAM CB5

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB6

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB7

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB8

This QA observed ZPMC qualified welding personnel identified as 070007 perform SMAW welding on weld joint identified as CB202G-018-070. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-P-2112.

This QA observed ZPMC qualified welding personnel identified as 053742 perform FCAW welding on weld joint identified as FB204-018-054. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2231-B-U2-F.

This QA observed ZPMC qualified welding personnel identified as 053609 and 058174 perform FCAW welding on weld joint identified as CB202A-008-017. ZPMC QC identified as Mr. Zhou Jie was present to monitor the welding process. The welding parameters as measured using QC's calibrated instruments appeared to be in general compliance with WPS-B-T-2232-Tc-U4b-F.

OBG CROSS BEAM CB9

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB10

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB11

This QA observed that no significant work was being performed on this crossbeam during the time QA was

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present.

OBG CROSS BEAM CB12

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB13

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB14

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB15

This QA observed that no significant work was being performed on this crossbeam during the time QA was present.

OBG CROSS BEAM CB16

This QA observed the contractors welding personnel identified as 205390, 217185 and 066268 performing Complete Joint Penetration (CJP) weld repairs on welds that have been rejected by the contractors Quality Control (QC) Ultrasonic Testing (UT) technicians. The contractors QC inspector identified as Mr. Zheng Zhi Wei informed this QA that the repairs were being performed in conformance with WPS-345-SMAW-2G (2F)-repair and WPS-345-FCAW-2G (2F)-repair. This QA noted that the contractor had not performed Magnetic particle Testing (MT) of the excavated areas prior to welding as specified in the repair WPSs on the following repaired weld joints: FB205-051-043, FB205-049-006, FB205-050-046, FB205-052-005 and 006. The contractors repair WPS #WPS-345-SMAW-2G (2F)-repair and WPS-345-FCAW-2G (2F)-repair specifies "Grind all repair areas to bright metal and perform Magnetic Particle Testing prior to the start of welding". This QA notified ZPMC QC inspector identified as Mr. Zheng Zhi Wei and ABF QA inspector identified as Mr. Yu Kum Ming of the above mentioned issue and that an incident report would be generated.

This QA observed the following CJP welds have been excavated in preparation for repair: FB205-052-013 and 016, FB205-050-005, FB205-049-005, FB205-051-009, FB205-052-021, FB205-051-016 and 019, FB205-049-016, FB205-050-025, 031 and 034 and FB205-049-031 and 034. These welds were not included in the above mentioned incident report due to the fact that these repairs have not yet been welded and ZPMC QC inspector identified as Mr. Zheng Zhi Wei informed this QA that ZPMC would perform the required MT on these excavations prior to completing the repair welds.

Unless otherwise noted, all work observed on this date appeared to be in general compliance with the applicable contract documents.

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Summary of Conversations:

As mentioned above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang (15000422372), who represents the Office of Structural Materials for your project.

Inspected By:	Hall,Steven	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer
